

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to because it is of improper Markush group format. It is unclear whether the flour must be obtained from a mixture of all of the grains listed or just one type of grain. A Markush-type claim recites alternatives in a format such as "selected from the group consisting of A, B **and** C." See *Ex parte Markush*, 1925 C.D. 126 (Comm'r Pat.1925). See MPEP 803.02. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6, 9 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131

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USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 6 recites the broad recitation cereal, and the claim also recites wheat, oats, barley, and rye and claims 9 and 11 recite the broad recitation hydrocolloid, and the claim also recites xanthan gum or carragenan, synthetic, semisynthetic hydrocolloids or mixtures thereof which are the narrower statements of the range/limitation.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Wistreich et al. (US 3,908,031).

Regarding claim 1, Wistreich et al. disclose a method to sterilize flour (Abstract, C2/L57-59), comprising the steps of : a) providing the flour obtained from grain (C2/L57-59, C4/Example 5); b) mixing the flour with alcohol (C2/L11-14, C4/Example); c) heating the mixture of flour and alcohol, under closed conditions (see rotating drum- C4/Example 4, see autoclave – C3/Example 2), to a temperature of at least 78°C (C2/L18-20); and d) obtaining a flour product having reduced microbial contamination (C4/Table III/IV).

While Wistreich et al. does not explicitly disclose obtaining a flour product having a reduced enzyme activity and without gelatinization of the starch part of the flour, given that

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Wistreich et al. disclose a method for sterilizing flour identical to that presently claimed, it is clear that the flour product would inherently possess the recited properties.

Regarding claims 3-5, Wistreich et al. disclose all of the claim limitations as set forth above. Further, Wistreich et al. disclose that the temperature in c) is 211° F (C4/Examples 4-5), the temperature in c) is maintained from 5 to 120 minutes (C2/L34-36), and the closed conditions in c) is under pressures held at 20 psi (C4/Example 4-5).

Regarding claim 6, Wistreich et al. disclose all of the claim limitations as set forth above and that the flour is obtained from wheat (C2/L57-60).

Regarding claim 7, Wistreich et al. disclose a flour product obtained by the method of claim 1 (Abstract, C4/Example 4-5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wistreich et al. (US 3,908,031).

Regarding claim 2, Wistreich et al. disclose all of the claim limitations as set forth above. Wistreich et al. does not explicitly disclose that the alcohol content in b) is less than 20% (weight/volume) of the total mixture. Where the disinfectant effect is a variable that can be modified by adjusting alcohol content in b), the precise alcohol content would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. As such, without showing unexpected results, the claimed alcohol content cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the alcohol content in step b) of the sterilization method disclosed by Wistreich et al. to obtain the desired balance between the disinfectant effect and ethanol flavor in the flour product (In re Boesch, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (In re Aller, 105 USPQ 223).

7. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moran et al. (US 3,970,763) in view of Wistreich et al. (US 3,908,031).

Regarding claim 8, Moran et al. disclose an aseptically packed cake batter (i.e. fluid mixture) comprising; a) a flour product and b) a sterile fluid phase (C1/L23-44).

Moran et al. fails to disclose a flour product according to claim 7.

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Wistreich et al. teach a sterilized flour product made by mixing flour with alcohol and heating the mixture to a temperature above 78°C (C2/L11-64). Further, Wistreich et al. teach that sterilization significantly reduces the bacteria count in the flour product (C1/L52-57).

Moran et al. and Wistreich et al. are combinable because they are concerned with the same field of endeavor, namely, baking ingredients. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a sterilized flour product, as taught by Wistreich et al., in the aseptically packaged cake batter of Moran et al. One would have been motivated to do so in order to decrease the bacteria count in the ingredient mixture, therefore increasing the shelf life of the aseptically packed fluid mixture.

While Moran et al. does not explicitly disclose that the starch of the flour remains in a non-gelatinized condition after packaging, given that modified Moran et al. disclose an aseptically packed fluid mixture identical to that presently claimed, it is clear that the mixture would intrinsically possess the recited properties.

Regarding claim 9, Moran et al. disclose all of the claim limitations as set forth above. Further, Moran et al. disclose that the product comprises a hydrocolloid such as caragheenan (C2/L23-26).

Regarding claim 10, modified Moran et al. disclose all of the claim limitations as set forth above. Additionally, Moran et al. disclose a method to produce an aseptically packed fluid mixture according to claim 8 comprising the steps of: a) providing and sterilizing a fluid phase (C1/L32-39); b) providing and sterilizing flour separately from the fluid phase (C1/L29-32); c) mixing the fluid phase and the flour product aseptically or sterile to a fluid mixture (C1/L40-41); and d) aseptically or sterile pack the fluid mixture (C1/L41-44).

While modified Moran et al. do not explicitly disclose that the starch of the flour remains in a non-gelatinized condition after treatment, given that modified Moran et al. disclose method to produce an aseptically packed fluid mixture identical to that presently claimed, it is clear that the mixture would intrinsically possess the recited properties.

Regarding claim 11, Moran et al. disclose all of the claim limitations as set forth above. Further, Moran et al. disclose that a hydrocolloid such as caragheenan is added to the fluid mixture under c) (C2/L23-26).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Gwartney whose telephone number is (571) 270-3874. The examiner can normally be reached Monday - Thursday; 7:30AM - 5:00PM EST, working alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. G./

Examiner, Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794